

# ARMY AND AIR FORCE SPACE POWER

## The Way Forward

[The following article has been simultaneously submitted to the Air & Space Power Journal and the Army Space Journal, since it addresses problems that cannot be resolved without the combined and concerted efforts of Space professionals within both the Air Force and the Army. It is the earnest hope of the authors, representing both services, that this may spark discussion in areas that have previously been ignored or unjustly dismissed.]

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**A**nyone surveying the current state of joint Space power, and in particular Air Force and Army Space power, is soon struck by a number of interconnected problems: a political conflict over who will occupy key Space positions (such as the Director of Space Forces, or within the Joint Functional Component Command-Space), coupled with an extremely convoluted organizational structure; a cultural conflict between CONUS-based Air Force Space officers who rarely deploy (and then for relatively short periods) and their Army counterparts, who operate in theater for extended periods of time; and a developing acquisitional conflict between the warfighter and those who equip him. These conflicts are the inevitable outcome of the division between the Army as primary user of Space and the Air Force as primary provider of Space. It is the aim of this paper to demonstrate not only that such a division hinders our nation's defense, but also that the eventual unification of Space power is the only way to realize its full potential.

It may surprise some that the primary obstacle for the further development of U.S. Space power has little to do with technology at all; it is, rather, a problem of organization. Consider what is perhaps the most critical area for Space power today: ensuring that those on the battlefield are aware and take full advantage of the full spectrum of Space capabilities, from counterspace/Space control and multi-spectral imagery to GPS navigational accuracy and Theater Ballistic Missile warning. To ensure that warfighters are able to utilize Space requires nothing less than the presence of Space professionals on the ground, in theater, not at the end of some call line which is only manned during a CONUS dayshift. The Army has created units with precisely this purpose in

mind, yet Air Force Space Command is removing all but a nominal presence in theater, depriving itself of an unparalleled opportunity to shape the operational use of Space.

Consider the Army Space Support Teams and Space Support Elements, which are the primary means by which the capabilities of Space power are conveyed to the warfighter on the battlefield. An Army Space Support Team is a deployable team of 6-7 Space personnel, typically made up of an FA40 (Army Space) major, a captain, and four NCOs specializing in Satellite Communication and intelligence analysis. A Space Support Element is often a four to five person cell at a Division or Corps, comprised of two to three FA40s in the rank of captain to lieutenant colonel and two NCOs, which have been with the unit prior to deployment and are an integrated part of its operations (G3) staff. The current Air Force contribution to these vital units is nothing less than abysmal. Most Army Space Support Teams and Space Support Elements have not included anyone representing Air Force Space Command, even though these cells are the primary means by which Space-related operational support is conveyed to the warfighter on the ground. Even when the Air Force has contributed someone to an Army Space Support Team or Space Support Element, it has been only for a four-month tour of duty, in contrast to the standard Army 12-month tour. Thus, the Air Force will rotate three officers through the same cell Army Space officers have manned from the beginning. Not only is this a problem for the proper training of the Air Force officer, who perhaps reaches a basic level of competence only upon the eve of rotating out, but it is also a source of institutional resentment, thus laying bare the widening cultural rift between the two services. And yet

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even this paltry contribution is being phased out. One would think that the executive agent for Space would have a more serious commitment to seeing Space fully exploited by the warfighter.

The Air Force may regard Space as its birthright, but like Esau it stands in danger of selling it for a mess of pottage. The Air Force remains the executive agent for Space, but that decision is not irreversible, and in the future, every shortcoming of the Air Force in the area of Space will be met by an Army only too willing to fill the gap. This is the inevitable outcome of the organizational schism between the warfighter as primary user of Space power and those who distantly provide the necessary support. This division, however, is far from inevitable. There are a number of concrete, graduated steps that, if enacted, would have far-reaching consequences for military Space.

The first step is to foster less of an adversarial attitude between Air Force Space Command and U.S. Army Space and Missile Defense Command, which requires moving far beyond the paltry number of joint billets currently in existence to nothing less than a full-scale exchange program. As the first proposed step in this transition, every deploying Army Space Support Team and Space Support Element should be accompanied by an Air Force Space officer, and for the duration of the deployment, not a fraction. These need not be restricted to Weapons School graduates (W13S), and not simply for manning reasons. Such a restriction would miss a crucial point: it is not Air Force expertise, per se, that is needed (although it would be much appreciated) so much as Air Force presence, creating the potential for a growing body of 13S's from all backgrounds to have had experience on the business end of U.S. Space power. What would be in order, however, is a willingness to send captains (and increasingly junior ones, at that), rather than majors, which ties in directly to a second problem and to the second proposal.

On the one hand, the numerically limited Functional Area 40

(FA40) of Army Space officers, comprised of barely 200 senior captains and majors, is straining at the demands put upon its scant forces, while on the other, it is next to impossible for Air Force 13S's to deploy, or, if allowed, then almost always in the guise of an augmentee rather than in a Space capacity. After spending a tour at Schriever or Buckley Air Force Bases, many lieutenants and captains feel little connection to the events they view on an ops floor screen, even though the telemetry they monitor is of the utmost importance to the warfighter's combat performance. Many of these young officers want to be more involved in the war on terror and would jump at the opportunity to do so as a Space officer. Even before Air Force Space Command began to loadshed Space professionals under "force shaping," many had already decided to leave the Air Force after their first tour, and they represent a great loss of Space experience to the military as a whole. This is experience that could be used by both the Army and the Air Force if these Space officers were only given the opportunity to work alongside the warfighter they have spent so long supporting from afar. 13S lieutenants and captains are streaming out of the Air Force, and the Army should allow them to enter this sister service as Space officers. Instead, some of these individuals will pursue Space in the civilian sector, while others will leave the field entirely, when many would gladly become Army Space officers if given the chance.

This should not be a one-way process. If Air Force Space Command will commit itself to putting a qualified 13S in every deploying division or corps Space cell, the Army should consider the advantages of a reciprocal move — namely, of making FA40s available for key positions within Air Force satellite operations and missile warning. This is not to propose adding one more body to a crew; on the contrary, it is to supply its future commander. With regard to feasibility, there is nothing insurmountable about this proposal. Within

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Air Force Space Command, it is not unusual to see a missile captain, having spent years in an environment quite different from satellite operations, take command of a crew after six months or so of training, when his previous experience in Space operations may have been limited to Space 100. The path for an Army FA40 would be similar. With regard to desirability, it would clearly bring a sense of immediacy to the operations floor if a captain or major with nearly a decade of experience as an infantryman, for example, became a part of daily operations. The warfighter and his needs would perhaps cease to be so much of an abstraction. Many Army FA40s, for their part, after having deployed multiple times to Bosnia, Afghanistan, and Iraq, might welcome the opportunity to spend a three-year tour stateside. This must be accompanied by a much greater FA40 presence in the Space and Missile Center (SMC) at Los Angeles Air Force Base, currently consisting of one officer, if future Space systems are to be operationally responsive.

The easiest as well as most desirable way to accomplish this two-fold transformation would be to establish a joint school for both Air Force and Army Space officers. Current developments already suggest such a parallel track: FA40s attend the National Security Space Institute's four-week Space 200 course prior to the rest of their Space Operations Officer Qualification Course. The six remaining weeks of the Space Operations Officer Course typically include trips to the Joint Space Operations Center at Vandenberg Air Force Base, the Space and Missile Center at Los Angeles Air Force Base, the White Sands Missile Complex, the Pentagon, the National Reconnaissance Office, the National Security Agency, and other agencies within the Space community, in addition to classroom-based training for future Army Space Support Team and Space Support Element members. Air Force Space officers who

are designated to join an Army Space Support Team or Space Support Element should receive the same training, with this difference: rather than attend Space 200 (which many of them may have already done), they would spend those four weeks learning ground operations and Army organization. Ideally, such training would be co-located, with Army and Air Force Space officers sharing the same facilities and discussing the same things, joining together for the final six weeks. Each Space Operations Officer Qualification Course class would then be truly joint, with future Army Space Support Team and Space Support Element members from both services sharing a common experience before they even deploy.

There is nothing earthshaking about these proposals, but they have consequences that are far-reaching. To begin with, the current dichotomy between warfighter (alternately "user" or "customer" in corporate parlance) and Space support will begin to be erased. There will be a growing body of captains in Air Force Space Command who will have been Space officers in a combat zone, and they will draw upon these experiences as they progress through their careers. Correspondingly, an increasing number of FA40s will have become experts in GPS satellite operations, satellite communication, acquisitions and many other areas. An FA40, for instance, who had been a part of a 2 SWS crew would bring an unrivaled expertise in theater ballistic missile warning to any Space cell of which he was a part. Taken together, these changes will have a tremendous impact on the cultural gap between Air Force and Army Space. It will matter less and less which billet in joint Space is occupied by the Air Force and which by the Army, when each service can look at a Space officer and know that his or her experience is in part their own. That, however, is only the beginning.

As Space becomes more operationally responsive and its capabilities

known at lower echelons within the Army, these lower levels will begin to call for this responsiveness within their own unit — in other words, to have Space Support Elements or a Space Officer at the brigade, battalion and even company level. In the area of imagery, for instance, Army Space officers bring a wealth of resources and knowledge of Space capabilities to bear, but as this imagery becomes of finer resolution, combining more sources, and more tactically usable, there will be an increasing demand from Soldiers for a low level, quick-access means to acquire this imagery. Having someone at the tactical level who knows what assets are in orbit, what they can and cannot provide, and how to get what they do provide will be invaluable. Similar issues will undoubtedly arise with Satellite Communication, Global Positioning and Blue Force Tracking, enemy Theater Ballistic Missiles, and special programs.

One possible model for meeting this challenge is provided by the field artillery. The Fire Support Officer at company level is typically a lieutenant fresh out of artillery training who is assigned to an infantry or armor unit. As head of the Fire Support Team, which includes enlisted members, he is responsible above all for calling in artillery fires in support of the maneuver company, the fire support being provided by an artillery unit. Fire Support Officers are embedded in each higher echelon, as well, usually with an Fire Support Officer captain at the battalion and a major at the brigade. Likewise, the Space officer could also be assigned to these echelons, and at each level, he would tap into the Space capabilities provided by the Army's 1st Space Brigade, Air Force Space Command, and the broader Space community, military, national and commercial. This is just one possible model.

As Space capabilities become more widely known, and as these capabilities themselves undergo future augmentation, it will clearly require more than a

lowering of the years required before one can track into FA40 (currently at the 7-year mark). As it is, there are members of Army Space Support Teams and Space Support Elements performing a vital Space mission, including lieutenants and NCOs, but since they are not FA40s, their expertise cannot so easily be kept within the Army Space community. Army Space cannot remain a small coterie of mostly field grade officers and meet the needs of its own service members. It must become its own branch, with fully developed career paths for both officers and enlisted. These proposals, taken together, represent a planned transition to just such a state.

As for Air Force Space Command, this plan would create an entirely new career path and a growing pool of Space officers with operational and even combat experience

and first-hand knowledge of the warfighting employment of Space assets. It would help Space Command come into its own as an operations branch truly parallel to that of flying operations.

With increasing traffic between the Air Force and Army Space branches, there would arise a group of Space warriors whose experience would cut across the military Space world from acquisitions to support ops to combat employment, sharing a common body of knowledge, a common medium, a common language, a common commitment, a common doctrine and a common destiny. It would then be clear that a true Space force would already be a reality, if not yet organizationally recognized as such. The path of development outlined here represents not only the most responsive employment of military

Space in service to the warfighter, but also the foundation for Space as a warfighting medium in itself.

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